## Electro-migration (EM) and Voltage (IR) Drop Analysis of Integrated Circuit (IC) Designs

## **Abstract**

Performing approximate analysis of modules based on corresponding layout files while requiring fewer computations than performing a transistor level simulation of a design of a module or integrated circuit. One feature enables IR/voltage drop and EM (electro migration) violations to be determined. Another features improves such analysis in case of memory modules. One more feature enables determination of whether sufficient voltages will be applied to program efuses in a module containing the efuses. Yet another feature enables the signal characteristics of an output path/pin to be determined to check for any EM violations.